

LISTING OF THE CLAIMS

The following listing, if entered, replaces all prior versions of the claims in the present application.

1. **(Currently Amended)** A method comprising:
determining whether a resource in a first cluster can be allocated to provide a quantity of the resource to an application, wherein
the first cluster comprises
a plurality of nodes, and
the determining whether the resource in the first cluster can be allocated
comprises
detecting whether one or more applications executing on one of the
nodes are compatible with the application, and
detecting whether the one of the nodes can provide the quantity of the
resource;
if the resource in the first cluster cannot be allocated to provide the quantity of the resource to the application, determining whether the first cluster can be reconfigured to provide the quantity of the resource to the application, wherein
the determining whether the first cluster can be reconfigured comprises
comparing a priority of at least one of the one or more applications to
a priority of the application;
if the first cluster can be reconfigured, enabling the first cluster to provide the quantity of the resource to the application by reconfiguring the first cluster; and
if the first cluster cannot be reconfigured, restarting the application in a second cluster having a sufficient amount of the resource to provide the quantity of the resource to the application.
2. (Original) The method of claim 1 further comprising:
selecting the application to be allocated the quantity of the resource from a plurality of

applications in accordance with a business priority for the application.

3. (Original) The method of claim 2 wherein
the reconfiguring the first cluster comprises:
 adding a second quantity of the resource to the first cluster.

4. (Original) The method of claim 2 wherein
the reconfiguring the first cluster comprises:
 partitioning the resource within the first cluster.

5. (Original) The method of claim 2 further comprising:
monitoring performance of a plurality of applications running in the first cluster; and
if performance of one application of the plurality of applications fails to satisfy a
criterion,
requesting to allocate a second quantity of the resource for the one application to
enable the performance of the one application to satisfy the criterion.

6. (Original) The method of claim 2 wherein
the first cluster is remote from the second cluster.

7. (Original) The method of claim 2 wherein
the determining whether the resource in the first cluster can be allocated to provide the
quantity of the resource to the application is performed in response to failure of
the application.

8. (Original) The method of claim 2 wherein
the determining whether the resource in the first cluster can be allocated to provide the
quantity of the resource to the application is performed in response to starting the
application.

9. (Original) The method of claim 2 wherein
the determining whether the resource in the first cluster can be allocated to provide the
quantity of the resource to the application is performed in response to identifying
a problem with performance of the application.

10. (Original) The method of claim 2 wherein
the determining whether the resource in the first cluster can be allocated to provide the
quantity of the resource to the application is performed in response to determining
that the application is not in conformance with a policy.

11. (Currently Amended) A system comprising:
a processor;
an interconnect coupled to the processor; and
a computer-readable storage medium coupled to the processor via the interconnect, the
computer-readable storage medium further comprising computer-readable code,
wherein when executed by the processor, the computer-readable code is
configured for:
determining whether a resource in a first cluster can be allocated to provide a
quantity of the resource to an application, wherein
the first cluster comprises
a plurality of nodes, and
the determining whether the resource in the first cluster can be
allocated comprises
detecting whether one or more applications executing on one of
the nodes are compatible with the application, and
detecting whether the one of the nodes can provide the
quantity of the resource;
determining whether the first cluster can be reconfigured to provide the quantity
of the resource to the application, if the resource in the first cluster cannot
be allocated to provide the quantity of the resource to the application,
wherein
the determining whether the first cluster can be reconfigured
comprises
comparing a priority of at least one of the one or more
applications to a priority of the application;
enabling the first cluster to provide the quantity of the resource to the application
by reconfiguring the first cluster, if the first cluster can be reconfigured;

and

restarting the application in a second cluster having a sufficient amount of the resource to provide the quantity of the resource to the application, if the first cluster cannot be reconfigured.

12. (Previously Presented) The system of claim 11, wherein the computer-readable code is further configured for:

selecting the application to be allocated the quantity of the resource from a plurality of applications in accordance with a business priority for the application.

13. (Previously Presented) The system of claim 12, wherein the computer-readable code is further configured for:

adding a second quantity of the resource to the first cluster.

14. (Previously Presented) The system of claim 12, wherein the computer-readable code is further configured for:

partitioning the resource within the first cluster.

15. (Previously Presented) The system of claim 12, wherein the computer-readable code is further configured for:

monitoring performance of a plurality of applications running in the first cluster; and requesting to allocate a second quantity of the resource for one application of the plurality of applications if the one application fails to satisfy a criterion to enable the performance of the one application to satisfy the criterion.

16. (Currently Amended) A system comprising:

a first determining module configured to determine whether a resource in a first cluster can be allocated to provide a quantity of the resource to an application, wherein the first cluster comprises

a plurality of nodes, and

the determining module is configured to determine whether the resource in the first cluster can be allocated by

detecting whether one or more applications executing on one of the

nodes are compatible with the application, and
detecting whether the one of the nodes can provide the quantity of the
resource;

a second determining module configured to determine whether the first cluster can be reconfigured to provide the quantity of the resource to the application, if the resource in the first cluster cannot be allocated to provide the quantity of the resource to the application, wherein

the second determining module is configured to determine whether the first
cluster can be reconfigured comprises
comparing a priority of at least one of the one or more applications to
a priority of the application;

an enabling module configured to enable the first cluster to provide the quantity of the resource to the application by reconfiguring the first cluster, if the first cluster can be reconfigured;

a restarting module configured to restart the application in a second cluster having a sufficient amount of the resource to provide the quantity of the resource to the application, if the first cluster cannot be reconfigured; and

communications hardware configured to enable communication between the first and second clusters.

17. (Previously Presented) The system of claim 16, further comprising:

a selecting module configured to select the application to be allocated the quantity of the resource from a plurality of applications in accordance with a business priority for the application.

18. (Previously Presented) The system of claim 17, further comprising:

an adding module configured to add a second quantity of the resource to the first cluster.

19. (Previously Presented) The system of claim 17, further comprising:

a partitioning module configured to partition the resource within the first cluster.

20. (Previously Presented) The system of claim 17 further comprising:

a monitoring module configured to monitor performance of a plurality of applications

running in the first cluster; and

a requesting module configured to request to allocate a second quantity of the resource for one application to enable the performance of the one application to satisfy a criterion.

21. **(Currently Amended)** A computer-readable storage medium comprising:

determining instructions configured to determine whether a resource in a first cluster can be allocated to provide a quantity of the resource to an application, wherein the first cluster comprises

a plurality of nodes, and

the determining instructions configured to determine whether the resource in

the first cluster can be allocated comprises

detecting instructions configured to detect whether one or more

applications executing on one of the nodes are compatible with

the application, and

detecting instructions configured to detect whether the one of the

nodes can provide the quantity of the resource;

determining instructions configured to determine whether the first cluster can be reconfigured to provide the quantity of the resource to the application, if the resource in the first cluster cannot be allocated to provide the quantity of the resource to the application, wherein

the determining instructions configured to determine whether the first

cluster can be reconfigured are further configured to compare a

priority of at least one of the one or more applications to a priority of

the application;

enabling instructions configured to enable the first cluster to provide the quantity of the resource to the application by reconfiguring the first cluster, if the first cluster can be reconfigured; and

restarting instructions configured to restart the application in a second cluster having a sufficient amount of the resource to provide the quantity of the resource to the application, if the first cluster cannot be reconfigured.

22. (Previously Presented) A computer-readable storage medium of claim 21 further comprising:
selecting instructions configured to select the application to be allocated the quantity of the resource from a plurality of applications in accordance with a business priority for the application.

23. (Previously Presented) A computer-readable storage medium of claim 22 further comprising:
adding instructions configured to add a second quantity of the resource to the first cluster.

24. (Previously Presented) A computer-readable storage medium of claim 22 further comprising:
partitioning instructions configured to partition the resource within the first cluster.

25. (Previously Presented) A computer-readable storage medium of claim 22 further comprising:
monitoring instructions configured to monitor performance of a plurality of applications running in the first cluster; and
requesting instructions configured to request to allocate a second quantity of the resource for one application to enable the performance of the one application to satisfy a criterion.

26. (Cancelled)

27. (Previously Presented) The method of Claim 1, wherein the first cluster comprises a plurality of nodes, wherein
at least one node among the plurality of nodes is a multiprocessor node, and
the reconfiguring comprises partitioning the multiprocessor node into multiple nodes.

28. (Previously Presented) The system of Claim 11, wherein the first cluster comprises a plurality of nodes, wherein
at least one node among the plurality of nodes is a multiprocessor node, and

the reconfiguring comprises partitioning the multiprocessor node into multiple nodes.

29. (Previously Presented) The system of Claim 16, wherein the first cluster comprises a plurality of nodes, wherein at least one node among the plurality of nodes is a multiprocessor node, and the reconfiguring comprises partitioning the multiprocessor node into multiple nodes.

30. (Currently Amended) The computer-readable storage medium of Claim 21, wherein the first cluster comprises a plurality of nodes, wherein at least one node among the plurality of nodes is a multiprocessor node, and the reconfiguring comprises partitioning the multiprocessor node into multiple nodes.